

Employment and unemployment survey

1. General Background of the Survey

1.1 Introduction

The survey covered about 10000 households nation-wide. Sample households were selected according to scientific bases using a multi-stage, cluster stratified, random design. It is noteworthy that the sample only represents the national level (Kingdom), Governorates, the three Regions (Central, North and South), and the urban and rural areas. This report stresses the survey objectives and methodology including the implementation stages as well as the design and selection of the sample. The survey was carried out in three stages, namely: the preparatory stage, which includes the survey design and geographical preparation; the fieldwork stage; the data processing stage, which covers editing, coding and data entry; and the tabulation and data dissemination stage.

The importance of this survey lies in that it provides a comprehensive data base on employment and unemployment that serves decision makers, researchers as well as other parties concerned in policies related to the organisation of the Jordanian labour market.

The present report contains a description of the survey methodology as well as the tabulations of the survey's main findings, grouped in 10 categories.

1.2 Objectives of the Survey

The main objectives of the survey are to:

- a. Identify the demographic, social and economic characteristics of the population and manpower according to different variables;
- b. Identify the occupational structure and economic activity of the employed persons, as well as their employment status;
- c. Identify the reasons behind the desire of the employed persons to search for a new or additional job;
- d. Measure the economic activity participation rates (the number of economically active population divided by the population of 15+ years old).
- e. Identify the different characteristics of the unemployed;
- f. Measure unemployment rates (the number of unemployed persons divided by the number of economically active population of 15+ years old) and the discouraged workers according to the various characteristics of the unemployed, and the changes that might take place in this regard;
- g. Identify the most important ways and means used by the unemployed persons to get a job, in addition to measuring durations of unemployment for such

- persons; and
- h. Identify the changes overtime that might take place regarding the above-mentioned variables.

1.3 Survey Frame

The sample of this survey is based on the frame provided by the preliminary results of the Population and Housing Census, 2004. For the purposes of sample design, rural or urban in each of the twelve governorates in Jordan was considered an independent stratum. The frame excludes the population living in remote areas (most of whom are nomads), as well as those living in collective dwellings, such as hotels, hospitals, work camps, prisons, and the like.

Since 2000, the DOS is using the Sample Rotation Method (SRM) in conducting its household surveys program. By this method, 50 percent of the sample units in one round are included in the next round, and the other 50 percent are replaced, and so on in subsequent rounds. This procedure is applied in order to provide more accurate data regarding unemployment rates, as well as the main features (landmarks) of each quarter of the year at governorate level. This allows the possibility of identifying changes between any quarter and the subsequent ones. This is in addition to the possibility of making comparisons among quarterly results of different years. Since 2002 till 2004, the rotation has been implemented at the block level.

1.4 Survey Sample

1.4.1 Sample Design

The population localities in each governorate were divided into urban and rural ending up with 24 strata. The localities in each governorate were divided into categories according to the population size in the locality.

The sample size for this survey consisted of 664 Primary Sampling Units (PSUs) (blocks), out of which, 15 households were selected as Ultimate Sampling Units (USUs) using a systematic random procedure.

The sample is designed to allow dissemination of the basic indicators at the national, governorate, regional, and urban and rural levels only. Table 1 below shows the distribution of the number of PSUs, number of households to be visited in each unit (block), and the total number of households to be visited by region and governorate.

In addition, the PSUs in each governorate and for each stratum were ordered according to the population size for each locality and for urban and rural. The sample was selected in two stages, in the first stage, a sample for 4

replicates was selected, from which 166 PSUs were selected. These units were distributed across governorates, urban and rural in each governorate according to the weight of each unit in terms of total households there in, and according to the variance within each stratum. Slight modifications regarding the number of these units were made to cope with the multiple of 4. This design, copes with the previous one for the purposes of making comparisons. The PSUs were selected using the Probability Proportionate to Size (PPS) with systematic selection procedure. The number of private households, in each cluster served as its weight. In the second stage, a constant number of households (15 households) was selected from each PSU selected in the first stage.

Table 1. Sample Size and Distribution by Region and Governorate

Region and Governorate	No. of PSUs			No. of Households in the Sample		
	Urban	Rural	Total	Urban	Rural	Total
Central Region	252	56	308	3780	840	4620
Amman	116	16	132	1740	240	1980
Balqa	36	20	56	540	300	840
Zarqa	80	8	88	1200	120	1320
Madaba	20	12	32	300	180	480
North Region	124	76	200	1860	1140	3000
Irbid	76	24	100	1140	360	1500
Mafraq	12	24	36	180	360	540
Jerash	16	16	32	240	240	480
Ajloun	20	12	32	300	180	480
South Region	92	64	156	1380	960	2340
Karak	16	28	44	240	420	660
Tafiela	24	8	32	360	120	480
Ma'an	20	24	44	300	360	660
Aqaba	32	4	36	480	60	540
Total	468	196	664	7020	2940	9960

1.4.2 Sample Coverage

The results of the fieldwork indicated that all sample households were visited (Table 2). The number of successfully completed interviews was 9778, that is 98.2 percent of total sample households. Among the reasons of non-interview (although three callbacks were made) the table shows that 1.7 percent of dwellings were closed at time of the visit.

The findings in Table 2 also indicate that the response rate, based on

dividing the number of completed questionnaires by the number of expected completed interviews (i.e. excluding both the closed and vacant dwellings) was 99.9 percent, and when excluding the vacant dwellings only, the response rate drops to 98.2 percent.

Table 2. Distribution of Interviews by Region, Governorate and Visit Outcome

Region and Governorate	Completed	Closed	Postponed	Vacant	Refused	Total no. of questionnaires
Central Region	4509	105	1	3	2	4620
Amman	1944	33	1	2	0	1989
Balqa	814	26	0	0	0	840
Zarqa	1280	38	0	0	2	1320
Madaba	471	8	0	1	0	480
North Region	2973	27	0	0	0	3000
Irbid	1480	20	0	0	0	1500
Mafraq	536	4	0	0	0	540
Jerash	477	3	0	0	0	480
Ajloun	480	0	0	0	0	480
South Region	2296	41	1	0	2	2340
Karak	650	10	0	0	0	660
Tafiela	473	6	0	0	1	480
Ma'an	646	14	0	0	0	660
Aqaba	527	11	1	0	1	540
Total	9778	173	2	3	4	9960

Table 3 displays the weighted and the unweighted number of the sample households. It is obvious that the unweighted number of households in large governorates (Amman, Zarqa and Irbid) is less than the weighted number, whereas, the opposite holds for the rest of governorates. Consequently, the sample size in the latter governorates was raised to provide sufficient number of households in such a way that represents both the governorate and the regional levels. Sampling errors were calculated for the Refined Activity Rate as well as the Unemployment Rate according to a set of relevant variables (See Appendix 1).

Table 3. Distribution of the Weighted and Unweighted Number of Households by Region and Governorate

Region and Governorate	Number of Households			
	Weighted		Unweighted	
	No.	%	No.	%
Central Region	6466	964.	4620	46.4
Amman	4023	440.	1980	19.9
Balqa	662	6.6	840	8.4
Zarqa	1540	15.5	1320	13.3
Madaba	241	42.	480	4.8
North Region	2627	426.	3000	30.1
Irbid	1743	17.5	1500	15.1
Ma'raq	404	4.1	540	5.4
Jerash	268	2.7	480	4.8
Ajloun	212	2.1	480	4.8
South Region	867	78.	2340	23.5
Karak	375	3.7	660	6.6
Tafiela	140	1.4	480	4.8
Ma'an	162	61.	660	6.6
Aqaba	190	2.0	540	5.4
Total	9960	100.0	9960	100.0

It is noteworthy that the sample of the present survey does not represent the non-Jordanian population, due to the fact that it is based on households living in traditional dwellings. In other words, it does not cover the collective households living in collective dwellings. Therefore, the non-Jordanian households covered in the present survey are either private households or collective households living in traditional dwellings. In Jordan, it is well known that a large number of non-Jordanian workers live as groups and spend most of their time at work places. Hence, it is more unlikely to find them at their residences during daytime (i.e. the time when the data of the survey are collected). Furthermore, most of non-Jordanian workers live in their work places, such as: workshops, sales stores, guard places, or under construction buildings sites. Such places are not classified as occupied dwellings for household sampling purposes. Due to all of the above, the coverage of such population would not be complete. Consequently, no data pertaining to them are published in this report.

2. The Preparatory Stage

This stage included a variety of overlapping processes to prepare a work plan; time-table; timely recruitment and training of the survey staff; and distribution of

tasks and work areas. This stage also included the preparation of necessary concepts and definitions; finalisation of survey documents such as the questionnaires, instruction manuals and other related forms; preparation of a system for manual data processing, including the editing and coding systems and manuals; preparation of electronic execution programs and implementation procedures regarding data entry, verification and debugging for cross-tabulation purposes.

2.1 Survey Main Documents

These documents include the survey questionnaire; instruction manuals for field supervisors and interviewers; office and electronic edit rules; and general and specialised coding manuals. This is in addition to the supplementary forms, such as: block demarcation identification forms; lists of heads of sample households; block sketches; office and field progress forms; and questionnaire editing forms for office and electronic data processors. Following is a brief description of the basic documents.

2.1.1 Survey Questionnaire

The questionnaire was designed and revised by the DOS technical subject- matter staff. It was finalised upon completion of the training program. The questionnaire is divided into main topics, each containing a clear and consistent group of questions, and designed in a way that facilitates the electronic data entry and verification. The questionnaire includes the characteristics of household members in addition to the identification information, which reflects the administrative as well as the statistical divisions of the Kingdom (See Appendix 2).

2.1.2 Instructions Manual

This manual includes the definitions and concepts used in the survey, and detailed instructions for the office and field staff at various supervisory and executive levels. It also contains detailed explanation of the questions, concepts and classifications in the questionnaire, and how to complete the data in the questionnaire with the highest degree of accuracy.

Further, the manual includes the basic edit rules to be followed by the survey staff during the data editing processes. Special emphasis was placed on the completeness and logical relationships among responses (internal consistency), and on how to detect and correct errors in the data.

2.1.3 Coding Manual

Generally, the design of the questionnaire took into account that all questions (except for locality, occupation, industry and educational specialization) are pre-coded. This manual included the procedures on how to

deal with the pre-coded questions, and how to code the open-ended responses that require corresponding codes (i.e. general coding). This manual also included instructions for specialized coding based on the standard manuals of the United Nation and its specialised agencies.

2.2 Definitions and Classifications

The definitions and classifications used in the 2005 EUS were prepared according to the international standards issued by the United Nations and some of its specialised agencies. Few modifications were made to suit the local conditions in Jordan. Following are the most important definitions used in the survey.

Locality: It is the place where people live, whether as individuals or groups, in fixed or mobile housing units. For the purposes of this survey, the locality was considered as the place of usual residence of the sample household members. In other words, it is the place of abode of the household. The Town and Village Index in Jordan served as a base for this purpose.

Stratum: Population localities in each governorates were divided to rural and urban.

Urban and Rural: For the purposes of the present survey, each locality with 5000 persons or more, according to the preliminary results as revealed by the 2004 Population and Housing Census, was considered “urban”. The remaining localities were considered “rural”.

Block: A block is a group of buildings that form a locality or part of it, with clear man-made boundaries such as streets, lanes, stairways, electricity or telephone posts, railways...etc., or natural boundaries such as mountains, rivers, and valleys that can be easily identified on the ground. The boundaries of each block were demarcated using discrete field signs and codes, in addition to special guiding arrows in order to delineate the exact borders of the block.

Building: A building is a permanent or temporary structure established on land or on water; constructed with any building material; consisting of one or more floors with a ceiling; used for residence, work, worship, or recreation. It has one or more entrances which lead from a public or private road to all or some of its parts. Attachments of the building, such as: a garage, store, shop, ...etc. are considered as parts of the main building. Abandoned structures, bus stops, bridges, and electricity huts are not classified as buildings.

Housing Unit: A housing unit is a building or part of it, with walls and a ceiling; suitable for residence by one or more households regardless of its occupancy status, even if it was vacant, closed or under construction at time of the survey. It consists of one or more rooms

with amenities. A housing unit has an independent entrance, which leads directly (or through a lane, passage or stairway) to a public road without passing through other housing units. Abandoned structures, which are inconvenient for human residence, are not considered housing units.

Private Household: A private household consists of one person or more occupying a separate housing unit or part of it. It has a head. The household members participate in expenditures from the income of the household head and /or some of its members. Some of the household members may not be related to each other. It is customary that the members share all or some of meals.

Household Head: A household head is a usual member of the household living in Jordan (according to the above definition of the household), who is recognised as such by other household members. He is usually responsible for living arrangements and decision taking regarding household affairs. He may be a male or a female, provided that he/she is not less than 15 years old.

Age: It refers to the estimated or calculated period of time between the date of birth and the date of interview, expressed in complete years regardless of the fractions of the year.

Major Age Groups:

15-24

25+

Broad Age Groups:

15-19 40-54

20-24 55-64

25-39 65+

Nationality: It is the legal affiliation of a person to a certain country, which is usually determined by the passport he holds or he has the right to hold.

School Enrollment: This concept denotes to any person aged 15 years and above who is now or was ever enrolled in a governmental or private educational institution inside or outside Jordan, regularly in the aim of obtaining an educational qualification or a degree, provided that the duration of study in such an institution is not less than one year. For example, students enrolled in basic education (grades 1-10), secondary education, community colleges and universities.

School Years Completed: The number of school years successfully completed by an individual, years of failure or repetition are excluded.

Educational Status: The educational status of a person aged 15 years and over at the time of interview, is defined as follows:

Without Qualification

Illiterate: A person who can not both read and write a simple description about himself in any language.

Person who can read and write: A person who can read and write in any language but does not have an educational qualification.

With Qualification

It is the highest educational stage successfully completed by a person at time of the interview. It may be one of the following stages:

- | | |
|-------------------------------|--------------------------|
| (1) Elementary | (6) Intermediate diploma |
| (2) Preparatory | (7) B.A., B.Sc. |
| (3) Basic education | (8) Higher diploma |
| (4) Vocational apprenticeship | (9) M.A. |
| (5) Secondary | (10) Ph.D. |

Educational Specialization: It is the field of study in which the person has successfully obtained his highest educational qualification, for example:

Persons with secondary qualification in one of the following streams:

- | | |
|----------------|--------------|
| (1) literary | (4) postal |
| (2) scientific | (5) hotels. |
| (3) commercial | (6) nursing. |
- Etc.

Persons with intermediate diploma in the field of:

- | | |
|-----------------------|------------------------|
| (1) Physical training | (4) Applied statistics |
| (2) History | (5) Accounting. |
| (3) Music | (6) Postal studies. |
- Etc.

Persons with B.A. or B.Sc. or higher in the field of:

- | | |
|----------------|----------------------------|
| (1) History | (7) Cardiology |
| (2) Archeology | (8) Electrical engineering |
| (3) Philosophy | (9) Industrial engineering |
| (4) Economics | (10) Pediology |
| (5) Accounting | (11) Agriculture |
| (6) Dentistry | (12) Public administration |
- Etc.

Marital Status: The civil status of a person aged 15 years and above at time of interview. It may be one of the following cases:

Never Married: A person of 15 years old and above who has never been married according to the social norms and customs (i.e. not actually married).

Married: A person of 15 years old and above engaged in actual marriage according to social

norms and customs, regardless of whether the couples were living together or not at time of the interview.

Divorced: A person of 15 years old and above whose actual marriage was legally dissolved by divorce and was not remarried at time of the interview.

Widowed: A person of 15 years and above whose last actual marriage was dissolved by death of spouse and was not remarried at time of the interview.

Separated: A person of 15 years old and above who has been actually ever married but living away from the spouse (e.g. due to dispute) without occurrence of divorce or death.

Economic Activity Status: This refers to the relationship of any household member (15+ years) with an economic activity during the seven days prior to the date of interview (the reference period). This status may be one of the following:

Employed: Any person of 15+ years of age who works for the public sector or the private sector, provided that he worked at least one hour during the reference period. This category includes the following cases:

Paid Employee: Any person of 15+ years of age who works for the public sector or the private sector and receives a monthly salary, or weekly or daily wages, and the like, provided that he should have worked at least one hour during the reference period. This category includes those joining a job or a job attachment even if they did not practise the job during the reference period due to temporary illness, or leave, or bad weather ...etc.

Employed in an entirely owned business: Any person of 15+ years of age who, during the reference period, worked in a business entirely owned by him/her. He might be a trades person with no business place, such as: painter, white washer, builder...etc.

Employed in a partially owned business: Any person of 15+ years of age who, during the reference period, worked in a business partially owned by him/her.

Unpaid family-owned business worker: Any person of 15+ years of age who, during the reference period, worked without payment in a business owned by the family or any of its members.

Other Workers: Any person of 15+ years of age who worked, during the reference period, in any work not elsewhere classified.

Unemployed: Any person of 15+ years of age, who is without work or job, able to work, available for work and is looking for work. The person is considered “unemployed” if he satisfies the following criteria:

- a. Does not practice any work (i.e. is without work or job). In other words, he has not worked for one hour or more during the reference period and was not temporarily absent from work;
- b. Is available for work, that is, he is ready or prepared to receive work immediately whether

- during 7 days prior to the date of interview, or within 15 days following the date of interview;
- c. Is searching for work, i.e. he has taken specific steps and spent some of the time or all the time in search for work in a period close to the four weeks prior to the date of interview. These steps may include: registration and applying directly to the employers; searching for work at certain workers' gatherings or assembly places; placing or answering advertisements in newspapers; seeking assistance of friends or relatives, ...etc; and
 - d. The person who is currently available for work, but did not search for work during the four weeks prior to the date of interview because he is waiting to return to his previous job or has found a job which he will join later on.

Unemployed persons are two types:

Unemployed ever worked: that is, any person of 15+ years of age who did not practise any work or job during the week prior to the date of interview, but he is able to work, available for work, looking for work, and has ever worked whether inside or outside Jordan.

Unemployed never worked: that is, any person of 15+ years of age who did not practise any work or job, but he is able to work, available for work, seeking work for the first time during the four weeks prior to the date of interview, and has never worked inside or outside Jordan.

Student: Any person of 15+ years of age, who is neither employed nor unemployed (i.e. not economically active), and who attends a school regularly or irregularly for the purpose of obtaining an educational qualification.

Housemaker: Any person of 15+ years of age who is not economically active and not attending school regularly, who is engaged in household duties or supervises those who perform such duties. Paid housemaids, baby setters, and the like are not included in this category.

With Means (income recipient): Any person of 15+ years of age, not economically active, not attending school and not engaged in household duties, but receives income from shares, royalties, pensions, or from any public or private aids or subsidies.

Disabled: Any person of 15+ years of age, not economically active, not attending school, not engaged in household duties, not income recipient and unable to work due to old age, physical or mental handicap, or chronic disease.

Others: Any person not elsewhere classified.

Actual Hours of Work: The number of actually worked hours by a worker during the seven days prior to the date of interview. This number is the sum of the following:

- a. Hours actually worked during normal periods of work;
- b. Overtime hours;
- c. The time that the worker spends at the work place in preparing, maintaining, and cleaning of

- work tools and equipment, or in preparing receipts, time sheets, and reports... etc.;
- d. The time that the worker spends at the work place waiting or standing by for the provision of work materials, or the repair of mechanical or electrical damages or break downs...etc.; and
 - e. The short breaks or rest periods that the worker spends at the work place to have tea, coffee, or soft drinks.

Actual work hours do not include the following:

- a. Hours paid for but not worked such as: paid annual vacations, paid official or public holidays, and paid sick leaves;
- b. Time designated for meal breaks, which normally does not exceed three hours; and
- c. Time spent on travel from home to work place, and vice versa.

Underemployment: This refers to the employed persons of 15+ years of age who desire to obtain a new or additional job, and are available for work during the reference period. Such persons should meet the following criteria:

- a. Current work is insufficient in terms of salary or incentives;
- b. Current work does not suit the educational qualification; and
- c. The hours spent in current work are short.

Name of Establishment where the Person Works: The name of a ministry, department, company, store, ...etc. in which the person is currently working.

Current Economic Activity: Type of the major economic activity of the establishment in which the person is working. For those not engaged in establishments, their economic activity is identified and recorded according to the specifications of their major occupations.

The economic activity should be clearly specified in terms of goods and services produced by the establishment, whether for marketing exchange or private consumption purposes. For example, distinction should be made whether the economic activity was wholesale or retail trade; commodity or passenger transportation by land, sea, or air; or animal breeding, wheat production or fruit trees cultivation...etc.

Distinction should also be made regarding the type of activity of certain government departments, such as: the ministries of Education, Agriculture, Health, Transportation ...etc. For example the economic activity of those working at schools belongs to the education sector, whereas for the officials at the headquarters of the Ministry of Education belongs to the public administration sector. Likewise, the economic activity for those working at the headquarters of the Ministry of Health belongs to the public administration sector, while for those working at hospitals, health centers and clinics, belongs to the health sector.

Current Occupation: It refers to the kind of work practised by the employed person during the seven days prior to the date of interview. For example, gynaecologist, general practitioner, dentist, garbage collector, basic education teacher...etc.

Current Employment Status: It denotes to the position of the employed person while practising his work. It may be one of the following:

Paid Employee: Any person working for another person or establishment and receives any kind of payments (in cash or in kind) whether it was monthly, weekly, daily, commission, piece- rate, ...etc.

Employer: Any person working in an establishment owned entirely or partially by him/her and hires one or more paid employees.

Own-account Worker: Any person working in an establishment owned entirely or partially by him/her, or practises a job or trade and hires no paid employees.

Unpaid Family Worker: Any person working for his family or one of its members, provided that he/she does not receive any kind of payment, even if he/she receives some sort of remuneration.

Unpaid Worker: Any person working for a person(s) other than a family member or establishment, and does not receive any kind of payments, even if he received some sort of remuneration, such as apprentices or trainees.

Monthly Income from Employment: The amount of money and other in kind benefits received by a person from his work during the calendar month prior to the interview. It may be one of the following:

Income from Employment: The salary or wage received by a person whether he was a regular or temporary worker or trainee in return for work he performs for others. This payment may be in cash or in kind. It includes any overtime allowances or remunerations, whether in cash or in kind. In case the person was working for more than one party, the total income from all sources should be recorded. The in kind payment includes the market value of clothes, meals, transportation, housing, ...etc. offered by the employer.

Income of Own-account Worker: It is the cash or in kind revenue that the person obtains from his work whether he/she is an employer or own-account worker, regardless of industry.

Duration of Search for Work: There are two types of duration:

For those unemployed, available for work and searching for work: It means the period of time (in months and years) spent by the job seeker from the beginning of his search for work up to the date of interview.

For those unemployed, available for work but not searching for work: It is the period of time that elapsed up to the date of interview where the person is awaiting to return to his previous job or to join a job in the near future.

2.3 Organisation of Survey Staff

The organisation of the survey staff who participated in the administrative and field activities was as follows:

Survey Administration Staff: It consisted of the Director General of Statistics as the Survey National Director and the Director of the Household Surveys Directorate as the Survey Executive Director. The latter is supported by his technical, field and administrative subject-matter aides.

Superintendent: He is the person in charge of the administration and execution of fieldwork operations in terms of planning of major daily field operations according to the specific timetable of the survey. He is the liaison between fieldwork teams and the survey administration and provides it with progress reports. He is selected from the most qualified DOS staff with long experience in census and survey field operations.

Inspectors: Each inspector leads and administers a number of supervisors (i.e. team leaders) in terms of planning their daily and weekly work assignments in cooperation with the superintendent. In addition, he assigns daily work to the supervisors and provides them with necessary survey documents and other needs, such as questionnaires, progress forms, stationary, brief cases, ...etc. He also provides the superintendent with office and field work progress reports. He should also perform final checking on a sample of questionnaires in the field as well as in the office. The inspector is the liaison between the field supervisors and the superintendent. Inspectors are selected from among those with long field experience.

Supervisors: Supervisors are team leaders in charge of implementing the daily work assignments. Each supervisor leads a team of 3-4 interviewers. He is responsible for assigning daily work to each interviewer under his mandate. He accompanies his team at all times in the field, manages and checks their work, and solves any field problems or inconveniences. He also provides the inspector with daily progress reports. Supervisors are selected from among those with long field experience.

Interviewers: The major task of the interviewer is to visit the sample households and fill in the required questionnaires. The interviewer reviews each questionnaire before leaving the household to make sure that he had covered all applicable questions. Interviewers are selected from among university graduates with relevant subject matter specializations.

Editors: Editors are in charge of reviewing the questionnaires and detecting errors, if any, and returning erroneous ones to the field whenever possible. The editors communicate with the superintendent and the survey administration through supervisors and inspectors for technical consultations and to speed the work

progress.

2.4 Recruitment and Training of Staff

The supervisory and executive levels of the survey staff were selected according to their past experience in censuses and surveys, familiarity with geographic areas, and educational qualification. It is noteworthy that all survey staff were university graduates.

The survey administration designed a training plan for the different levels of survey staff before fielding the survey. A classroom-training program was held in the survey headquarters. The program focused on survey objectives, data collection procedures, confidentiality of data, and how to deal with households and overcome difficulties. The program also included a detailed explanation of the questionnaire inputs, concepts and instructions related to data collection and field editing. The staff was trained on supervisory tasks, organisation of work, required specific tasks and assignments, sampling method and distribution of work over the Country. The numbering system used for the household national frame and how to locate sample households were also explained.

In addition to the above training, further classroom and field practices demonstrated how to fill in the questionnaire. Errors emerged from these applications were detected and explained to the field staff. The training program lasted for 10 days.

An additional training program was designed for office processors (editors and coders) on edit rules and data consistency checks. The coders were also trained on coding rules and procedures. Also, computer subject-matter specialists trained keyers on data entry and verification and selected office-processing staff on how to detect and correct error lists.

3. Data Collection Stage

3.1 Organization of Field Work

This stage started on February the 1st 2005 and ended on March the 7th as scheduled. The fieldwork was organised in a way that ensured complete control, accuracy and consistency of field logistics to obtain high quality data.

3.2 Mode of Data Collection

The established mechanism and logistics of fieldwork can be described as follows. The inspector delivers to the supervisors the work area under his mandate and other requirements, such as questionnaires, stationary, brief cases...etc.. The supervisor familiarizes himself with the work area by using the prepared maps and sketches. The supervisor transfers the identification

information from the buildings, dwellings, and household frame and enters such information on questionnaires each day for the next day visits to sample households.

The supervisor accompanies his team daily to the field and assigns the adjacent dwellings and sample households to his team members in order to minimize distances and to maximize production of the interviewers. The supervisor should move continuously in the assigned area to oversee work progress, check questionnaires, attend actual interviews, and solve problems that emerge in the field.

3.3 Field Editing

Among the major tasks of the supervisor is to organise and fill in daily and weekly work progress forms and deliver them to the inspector. The inspector, in turn, submits such forms to the superintendent, who delivers them to the survey executive director. The latter oversees, assesses and compares these forms against the work plan with the superintendent and makes the necessary modifications.

The completed questionnaires are edited daily in the field for completeness and consistency and to make sure that all sample households have been visited. Then the completed questionnaires are packed and delivered to the superintendent and sent to the survey head office.

The field inspector is in charge of administering all field operations and supervisors in the area under his mandate, and monitors their work progress according to the work plan. He prepares daily progress reports and checks the quality of data by editing a sample of the completed questionnaires. The inspector also maintains communication with the survey administration, exchanging views or consultancies regarding work progress and field problems.

It is noteworthy that the survey administration staff often visited the field staff at work areas in different governorates to oversee their performance and work progress as well as to help in solving any difficulties or problems.

4. Data Processing Stage

The organisation of questionnaires is an important step in the data processing stage. Hence, the questionnaires were ordered, labeled and stored in a special archive in a way that facilitates easy and quick handling for subsequent processes. A special record shows the progress of work in all the sample areas, as well as the flow of questionnaires between the office processing staff and the computer processors.

4.1 Office Processing

All completed and field-edited questionnaires were batched and sent to the

survey head office where they were further edited. The editing process focused on the completeness and consistency of data in the questionnaires in order to minimise errors before starting the electronic data processing stage. The editing processes overlapped the fieldwork. The processing activities started on the 5th of February 2005 and ended on March the 17th.

The descriptive data in the questionnaires were coded in a way that facilitates subsequent processes. The general coding process overlapped the field work and office process (except for locality, occupation, industry and educational specializaition). In other words, these processes went hand in hand and ended almost at the same time.

A special team of data processors performed the speicalised coding and the final revision of the already edited and coded questionnaires. This process was under the direct supervision of the survey administration staff in order to minimise errors before starting electronic data processing activities.

It is worth mentioning that, according to the progress of work in the office, the processing teams were continuously regrouped to ensure a relatively balanced production and flow of questionnaires among the office and electronic data processing stages.

4.2 Electronic Processing

This stage began by assigning a liaison officer to provide the data entry division with the edited and coded questionnaires, using a special flow record. The questionnaires were sent to the said division in the form of batches and returned to the liaison officer in the same way after completing data entry process.

The data keyers were trained by a subject- matter person on entry procedures and rules using the already prepared systems and programs. The available computers were fully utilized to accelerate the data entry process. The data were entered in a way that prompt mechanical editing can be made via entry screens, where focus was placed on completeness of data and whether the coded values lie within the valid range. During data entry, the consistency checks were applied to ensure that the keyed data are consistent with each other as well as with other variables.

Following the completion of an error-free data file, frequency tables were produced and checked by subject-matter staff for completeness, range and consistency. Then, some direct rules were applied to certain questions and were checked against the questionnaire till they were finally authorised. The findings were then tabulated using the already prepared dummy tables. Finally, the tabulations were checked for both internal and external consistencies.

4.3 Tabulation and Dissemination of Results

A tabulation results plan has depended on previous Employment and Unemployment Surveys where ever required programs were prepared and tested.

When all prior data processing steps were completed, the actual survey results were tabulated using an ORACLE package. The tabulations were then thoroughly checked for consistency of data, titles, inputs, concepts, as well as the figures there in. The final report was then prepared, containing detailed tabulations as well as the methodology of the survey.